

## **EXHIBIT A**

UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS  
EASTERN DIVISION

STEVEN G. WICKS;  
GERALD A. KALBFLEISCH; MICHAEL  
HATHAWAY; and MYRTLE HATHAWAY

Plaintiffs,

v.

PUTNAM INVESTMENT  
MANAGEMENT, LLC; and PUTNAM  
RETAIL MANAGEMENT, LLP

Defendants.

Civil Action No: 04-CV-10988 (GAO)

**PLAINTIFFS' FIRST SET OF REQUESTS FOR THE PRODUCTION  
OF DOCUMENTS AND TANGIBLE THINGS TO DEFENDANTS PUTNAM  
INVESTMENT MANAGEMENT, LLC AND PUTNAM RETAIL MANAGEMENT, LLP**

Pursuant to Federal Rules of Civil Procedure 26 and 34, Plaintiffs Steven G. Wicks, Gerald A. Kalbfleisch, Michael Hathaway, and Myrtle Hathaway (collectively, "Plaintiffs") hereby request that Defendants Putnam Investment Management, LLC ("PIM") and Putnam Retail Management, LLP ("PRM") (collectively, "Defendants") provide written responses to these requests, and produce all responsive documents and tangible things, within thirty (30) days of service of these requests.

**I. INSTRUCTIONS**

1. Defendants are required to respond to this request for production of documents and tangible things by drawing upon all materials in their possession, ownership, custody, or control, actual or constructive, including materials that Defendants have a right or ability to secure from any other source. These sources include, but are not limited to, Defendants'

employees, agents, managing agents, attorneys, accountants, investment bankers, consultants, advisers, officers, directors, or representatives of any type whatsoever. These sources further include, but are not limited to, Defendants' predecessors, successors, parents, subsidiaries, affiliates, divisions, and their respective employees, agents, managing agents, attorneys, accountants, investment bankers, consultants, advisers, officers, directors, or representatives of any type whatsoever.

2. If any document or tangible thing herein requested was, but no longer is, in Defendants' possession or subject to their control, whether actual or constructive, state what disposition was made of the document or tangible thing, why such disposition was made, to whom the document or tangible thing was transferred or delivered if applicable, where the document or tangible thing presently is located, and the date or dates (or approximate date or dates) on which such disposition was made.

3. In the event that Defendants file a proper and timely objection to any portion of any individual request for the production of documents and tangible things presented herein, Defendants are required to respond to all other portions of that request that do not fall within the ambit of their objection.

4. If any portion of any document or tangible thing is responsive to any production request herein, then the entire document or tangible thing must be produced. If any requested document or tangible thing cannot be produced in full, then Defendants must produce that document or tangible thing to the greatest extent possible. Whenever a document or tangible thing is not produced in full, or is produced in redacted form, Defendants must indicate that fact on the document or tangible thing produced.

5. If any document or tangible thing responsive to a production request herein is withheld in whole or in part, for any reason whatsoever, including, but not limited to, any claim of privilege, work product, confidentiality, or trade secret, then Defendants must promptly provide a privilege log which states with respect to each such document, tangible thing, or withheld portion thereof: (a) the privilege or ground under which it is being withheld; (b) the type of document or tangible thing (*e.g.*, memo, letter, e-mail); (c) a description of the subject matter thereof; (d) the identity of its author or creator; (e) the identity of all persons to whom it is addressed and all persons to whom copies thereof ever have been furnished; (f) the date thereof; and (g) the present custodian and location thereof.

6. If there do not exist documents or tangible things responsive to a specific production request herein, then Defendants must indicate that fact in their written response hereto.

7. The documents or tangible things produced in response hereto shall be segregated and clearly marked or labeled so as to correspond to the specific production requests to which such documents or tangible things are responsive and are being produced. Alternatively, such documents or tangible things shall be produced as they are kept in the usual course of business, including the production of files and file labels from which such documents or tangible things are taken.

8. All documents or tangible things produced pursuant hereto are to be delivered to Marc N. Henschke, Esq. at the offices of Robins, Kaplan, Miller & Ciresi LLP, 800 Boylston Street, 25th Floor, Boston, Massachusetts 02199.

9. This is a continuing request for the production of documents and tangible things. Thus, if after making its initial production(s), Defendants become aware of any additional

responsive documents or tangible things in their possession, ownership, custody or control (actual or constructive), including materials which it has a right to secure from any other source, Defendants are required without further request to produce, or to make available for inspection and copying, such additional documents or tangible things.

## **II. DEFINITIONS**

1. The terms “documents” and “tangible things” as used herein shall mean each non-identical copy of any of the types of materials referenced in Local Rule 26.5(c)(2) and Fed. R. Civ. P. 34(a), and shall specifically include emails, voice mails, instant messages, and computer data, and any electronic, magnetic, or digital media on which information can be stored, including but not limited to tapes, hard drives, discs, and any other form of computer memory.

2. The term “non-identical copy” as used herein shall mean any document or tangible thing that, but-for markings, additions, deletions, signatures, modifications of any kind (including, but not limited to, notations on the backs or margins of pages thereof, blind carbon copy notations, attachments, alterations, amendments, or mark-ups) would otherwise be identical to other documents or tangible things responsive to any production request herein. Each non-identical copy constitutes a distinct document or tangible thing and must be produced in response hereto.

3. The term “meeting(s)” as used herein shall mean any assembly, convocation, encounter, or contemporaneous presence of two or more persons for any purpose, whether or not planned, arranged, or scheduled in advance, whether or not occurring face-to-face or by other means including, without limitation, by telephone, videoconference or instant messaging, and whether or not the meeting was informal or formal or occurred in connection with some other activity.

4. The term “agreement” as used herein shall mean any contract, transaction, or other arrangement of any kind, whether conditional, executed, executory, express, or implied, and whether oral or written, in which rights are granted or obligations assumed. The term “agreement” shall apply to completed, actual, contemplated, or attempted agreements or renewals of agreements.

5. The term “negotiate” or any variant thereof as used herein shall mean, without limitation, any deliberations, discussions, conferences, bargaining or trading between parties or their agents, representatives, counsel, or any other persons as herein defined.

6. The term “any” shall mean “any and all.” The term “all” as used herein also shall mean “any and all.”

7. The terms “and” and “or” as used herein shall be construed conjunctively or disjunctively to bring within the scope of these production requests any and all information which might otherwise be construed as outside their scope.

8. The singular form of a noun or pronoun shall be considered to include within its meaning the plural form of the noun or pronoun so used, and vice versa; the use of the masculine form of a pronoun also includes within its meaning the feminine form of the pronoun so used, and vice versa; and the use of any tense of any verb includes also within its meaning all other tenses of the verb so used.

9. All entities referred to herein shall be deemed to include their parent companies, subsidiaries, affiliates, directors, officers, employees, agents, successors, assigns, and representatives thereof, including attorneys, consultants, accountants, and investment bankers.

10. The terms “communication,” “person,” and “concerning” shall have the meanings set forth in Local Rule 26.5.



11. The term "Complaint" shall mean the Amended Complaint filed in this action on or about April 4, 2005.

12. The term "Answer" as used herein shall mean Defendants' Answer And Affirmative Defenses to the Complaint filed in this action on our about April 21, 2005.

13. The term "The Funds" as used herein shall mean, collectively, the Putnam mutual funds identified on Exhibit A to the Complaint, including any mutual funds with different names by which any of these funds were formerly known.

14. The term "PIM" as used herein shall mean the named Defendant Putnam Investment Management, LLC, and any of its agents, assigns, affiliates, predecessors in interest, representatives, employees, servants, associates, attorneys, or any other persons or entities through which Putnam Investment Management, LLC has conducted business potentially including, but not limited to, Putnam LLC; Putnam Investments; Putnam Fiduciary Trust Company; Putnam Investor Services; The Putnam Advisory Company, LLC; Putnam Advisory Company, LLP; Putnam Investments Limited; and Putnam Investments Trust.

15. The term "PRM" as used herein shall mean the named Defendant Putnam Retail Management, LLP, and any of its agents, assigns, affiliates, predecessors in interest, representatives, employees, servants, associates, attorneys, or any other persons or entities through which Putnam Retail Management, LLP has conducted business potentially including, but not limited to, Putnam LLC; Putnam Investments; Putnam Fiduciary Trust Company; Putnam Investor Services; The Putnam Advisory Company, LLC; Putnam Advisory Company, LLP; Putnam Investments Limited; and Putnam Investments Trust.

16. The terms "Defendants," "you," "your," or "yours" as used herein shall collectively mean, unless otherwise specified in a particular request, PIM and PRM.

17. The term “PAC” as used herein shall mean Putnam Advisory Company, LLC, and any of its agents, assigns, affiliates, predecessors in interest, representatives, employees, servants, associates, attorneys, or any other persons or entities through which Putnam Advisory Company, LLC has conducted business.

18. The term “Management Contract” as used herein shall mean any contract between an investment advisor and a mutual fund or other client whereby an investment advisor agrees to provide, *inter alia*, management and/or investment advisory services in exchange for fee-based compensation. By way of example, the term “Management Contract” is meant to include, but not be limited to, contracts of the type that PIM has entered into with The Funds.

19. The term “Management Fees” as used herein shall mean the fees that an investment advisor charges and/or receives pursuant to the breakpoint fee schedule contained in any particular Management Contract.

20. The term “Portfolio Selection Fees” as used herein shall mean that portion of its Management Fees that an investment advisor charges and/or receives in exchange for the services of furnishing an investment program, and for making investment decisions about what securities shall be purchased, held, sold, or exchanged, and/or what portions of client assets shall be held uninvested. As such, the term “Portfolio Selection Fees” is meant to *exclude*, for example, those other portions of its Management Fees that an investment advisor charges and/or receives for other services such as managing, supervising, and conducting a client’s other affairs and business, for furnishing office space and equipment, for providing bookkeeping and clerical services, and for placing orders for purchase and sale of a client’s portfolio securities.



21. The term “Putnam Mutual Funds” as used herein shall mean, collectively, the entire family of open-end registered investment companies managed or operated by any Putnam entity including, but not limited to, The Funds.

22. The term “Distribution Plan” as used herein shall mean any plan adopted by a mutual fund, and/or by any class of shares of a mutual fund, pursuant to Rule 12b-1 of the Investment Company Act of 1940, 15 U.S.C. § 80a-12(b); 17 C.F.R. § 270.12b-1.

23. The term “12b-1 Fees” as used herein shall mean the aggregate of all types of fees that an investment advisor and/or any affiliated entity charges and/or receives from a mutual fund under or pursuant to a Distribution Plan.

24. The term “Board of Trustees” as used herein shall mean the entire board for any of The Funds -- including their independent staff, auditors, and legal counsel -- as well as any committees, subcommittees, groups, or other portions of such boards.

25. The term “Board of Trustees Committees” as used herein shall mean, collectively, all committees existing under any particular Board of Trustees for any of The Funds including, but not limited to, the Audit and Pricing Committee; the Board Policy and Nominating Committee; the Brokerage and Custody Committee; the Communication, Service, and Marketing Committee; the Contract Committee; the Executive Committee; the Investment Oversight Committees; and any other committees with different names by which any of these committees were formerly known.

26. The term “Institutional Account” as used herein shall mean an account of a non-mutual fund client for which an investment advisor provides management and/or investment advisory services. By way of example, the term “Institutional Account” is meant to include, but not be limited to, accounts held by individual clients; corporate profit-sharing and/or pension

fund clients; state, governmental, and/or public employee retirement fund clients; university endowment fund clients; charitable foundation clients; collective investment vehicle clients; and/or any other categories of clients of the types serviced by PAC.

27. The term “Investment Management Team” as used herein shall mean, relative to any particular client account, that group of persons employed by or associated with an investment advisor who participate in formulating and/or providing an investment program for, and/or making investment decisions on behalf of, a client. As such, the term “Investment Management Team” is meant to include, but not be limited to, Portfolio Leaders, Portfolio Members, and research analysts. The term “Investment Management Team” is also meant to include, but not be limited to, Managing Directors, Portfolio Managers, Chief Investment Officers, and/or Group Chief Investment Officers to the extent that these titles represent positions distinct from Portfolio Leaders and/or Portfolio Members.

28. The term “Illinois Actions” as used herein shall mean, collectively, the two lawsuits previously filed in the United States District Court for the Southern District of Illinois -- bearing Civil Action Nos. 01-CV-287-MJR and 04-CV-145-MJR respectively -- in which PIM and PRM were named as defendants with respect to, *inter alia*, causes of action brought under Section 36(b) of the Investment Company Act of 1940, 15 U.S.C. § 80a-35(b).

29. The term “Economies of Scale Benefits” as used herein shall mean the cost savings that are realized when the per unit cost of providing services and/or resources to a client account decreases as the amount of assets under management increases. As such, the term “Economies of Scale Benefits” is meant to include both the cost savings that occur at the individual mutual fund or client account level, and at the level of a complex or family of mutual funds or client accounts.

30. The term "Fall-Out Benefits" as used herein shall mean the aggregate of direct and indirect benefits that providers of services in connection with a Management Contract and/or a Distribution Plan may receive over and above their collection of Management Fees and/or 12b-1 Fees. As such, the term "Fall-Out Benefits" is meant to include, for example, brokerage and/or research services received from broker-dealers; soft-dollar allocations; transfer agency fees; custodian fees; attraction of new customers to other funds and products offered by said providers of services; and/or any other benefits.

31. The term "Damages Period" as used herein shall mean the period of time commencing on May 17, 2003 and ending upon the final resolution of this action by way of unappealable final judgment or settlement.

### **III. REQUESTED DOCUMENTS AND TANGIBLE THINGS**

The following specific requests for the production of documents and tangible things are subject to the "INSTRUCTIONS" and "DEFINITIONS" set forth above.

#### **REQUEST FOR PRODUCTION NO. 1:**

All documents and tangible things in your possession, custody, or control that comprise the categories of materials identified, or to be identified, in Defendants' Initial Disclosure served pursuant to Fed. R. Civ. P. 26(a)(1)(B).

#### **REQUEST FOR PRODUCTION NO. 2:**

All documents and tangible things in your possession, custody, or control that constitute any exhibits that Defendants shall or may use at trial.

**REQUEST FOR PRODUCTION NO. 3:**

All documents and tangible things in your possession, custody, or control that tend to support or refute any of the allegations contained in the Complaint, or any of the responses or affirmative defenses thereto pled in the Answer.

**REQUEST FOR PRODUCTION NO. 4:**

All documents and tangible things in your possession, custody, or control that constitute or reflect communications with experts retained or to be retained by Defendants, and/or that comprise the materials reviewed, considered, examined, or analyzed by such experts.

**REQUEST FOR PRODUCTION NO. 5:**

All documents and tangible things in your possession, custody, or control relevant to establishing the total amounts of Management Fees, Portfolio Selection Fees, and 12b-1 Fees that PIM, PRM, or other affiliated Putnam entities have received from each of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 6:**

All documents and tangible things in your possession, custody, or control relevant to establishing the total profits and profit margins that PIM, PRM, or other affiliated Putnam entities have realized in connection with the Management Fees, Portfolio Selection Fees, and 12b-1 Fees that they have received from each of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 7:**

All documents and tangible things in your possession, custody, or control relevant to establishing the total costs, expenses, and expense ratios that PIM, PRM, or other affiliated

Putnam entities have incurred in connection with all services and/or resources that they have provided in exchange for the Management Fees, Portfolio Selection Fees, and 12b-1 Fees that they have received from each of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 8:**

All documents and tangible things in your possession, custody, or control relevant to identifying each of the various types of services and/or resources that PIM, PRM, or other Putnam entities have provided in exchange for the Management Fees, Portfolio Selection Fees, and 12b-1 Fees that they have received from any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 9:**

All documents and tangible things in your possession, custody, or control relevant to unbundling the Management Fees, Portfolio Selection Fees, and 12b-1 Fees that PIM, PRM, or other affiliated Putnam entities have received from any of the Putnam Mutual Funds into their component portions corresponding to each of the various types of services and/or resources that they have provided to The Funds.

**REQUEST FOR PRODUCTION NO. 10:**

With respect to each of the unbundled component portions of the Management Fees, Portfolio Selection Fees, and 12b-1 Fees referenced above in Request For Production No. 9, all documents and tangible things in your possession, custody, or control relevant to establishing the amounts that PIM, PRM, or other affiliated Putnam entities have received from each of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 11:**

With respect to each of the unbundled component portions of the Management Fees, Portfolio Selection Fees, and 12b-1 Fees referenced above in Request For Production No. 9, all

documents and tangible things in your possession, custody, or control relevant to establishing the profits and profit margins that PIM, PRM, or other affiliated Putnam entities have realized from each of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 12:**

All documents and tangible things in your possession, custody, or control relevant to establishing the costs, expenses, and expense ratios that PIM, PRM, or other affiliated Putnam entities have incurred with respect to each of the various types of services and/or resources that they have provided in exchange for the Management Fees, Portfolio Selection Fees, and 12b-1 Fees that they have received from each of the Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 13:**

All documents and tangible things in your possession, custody, or control relevant to establishing what dispositions or uses, and in what amounts, PIM, PRM, or other affiliated Putnam entities have made of all portions of the Management Fees and 12b-1 Fees that they have received from each of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 14:**

All documents and tangible things in your possession, custody, or control that concern, refer or relate to the issues of if, whether, how, or to what degree any existing mutual fund shareholder benefits from paying 12b-1 Fees.

**REQUEST FOR PRODUCTION NO. 15:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of whether paying 12b-1 Fees is unfair, harmful, detrimental,



disadvantageous, or contrary to the interests or welfare of any existing mutual fund shareholder.

**REQUEST FOR PRODUCTION NO. 16:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issue of whether the Management Fees and/or 12b-1 Fees paid to PIM, PRM, or other affiliated Putnam entities by any of the Putnam Mutual Funds have been excessive.

**REQUEST FOR PRODUCTION NO. 17:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of whether it is advisable, legal, appropriate, proper, fair, justified, or warranted to directly or indirectly charge 12b-1 Fees to any existing mutual fund shareholder.

**REQUEST FOR PRODUCTION NO. 18:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of whether there have been, should be, or may be any increases, reductions, curtailments, or eliminations of any portion of the Management Fees and/or 12b-1 Fees charged to any of the Putnam Mutual Funds by PIM, PRM, or other affiliated Putnam entities.

**REQUEST FOR PRODUCTION NO. 19:**

All documents and tangible things in your possession, custody, or control that reflect, concern, or relate to any comparisons or contrasts drawn between the nature, amounts, fee structures, breakpoints, dispositions, or uses of the Management Fees, Portfolio Selection Fees, and/or 12b-1 Fees that PIM, PRM, or other affiliated Putnam entities receive from any of the

Putnam Mutual Funds on the one hand, and those that PAC or any non-Putnam entities receive from any Institutional Accounts or any non-Putnam mutual funds on the other hand.

**REQUEST FOR PRODUCTION NO. 20:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of if, whether, how, or in what amounts PRM or other affiliated Putnam entities profit, benefit, or save on expenses by virtue of receiving 12b-1 Fees from any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 21:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of whether the nature or amounts of Management Fees that PIM has charged to any of the Putnam Mutual Funds are advisable, legal, appropriate, proper, fair, justified, or warranted.

**REQUEST FOR PRODUCTION NO. 22:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of whether the nature or amounts of Management Fees that PIM has charged to any of the Putnam Mutual Funds are excessive, unfair, harmful, detrimental, disadvantageous, or contrary to the interests or welfare of any of the Putnam Mutual Funds or their shareholders.

**REQUEST FOR PRODUCTION NO. 23:**

All documents and tangible things in your possession, custody, or control that reflect, concern, or relate to any comparisons or contrasts drawn between the nature or extent of the services that PIM provides to any of the Putnam Mutual Funds pursuant to any Management

Contract on the one hand, and those that PAC or any non-Putnam entity provides to any of their Institutional Accounts pursuant to any Management Contract on the other hand.

**REQUEST FOR PRODUCTION NO. 24:**

All documents and tangible things in your possession, custody, or control that reflect, concern, or relate to any comparisons or contrasts drawn between the profits or profit margins that PIM, PRM, or other affiliated Putnam entities have realized on the Management Fees, Portfolio Selection Fees, and/or 12b-1 Fees that they receive from any of the Putnam Mutual Funds on the one hand, and those that PAC or any non-Putnam entity have realized with respect to any Institutional Account or any non-Putnam mutual fund client on the other hand.

**REQUEST FOR PRODUCTION NO. 25:**

All documents and tangible things in your possession, custody, or control that reflect, concern, or relate to any comparisons or contrasts drawn between the costs, expenses, or expense ratios that PIM, PRM, or other affiliated Putnam entities have incurred with respect to any services and/or resources provided under any Management Contract or Distribution Plan for any of the Putnam Mutual Funds on the one hand, and those that PAC or any non-Putnam entity have incurred with respect to any services provided to any Institutional Client or any non-Putnam mutual fund client on the other hand.

**REQUEST FOR PRODUCTION NO. 26:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the nature, amounts, fee structures, breakpoints, dispositions, or uses of any Management Fees, Portfolio Selection Fees, and/or 12b-1 Fees charged or received by PAC or any non-Putnam entity.

**REQUEST FOR PRODUCTION NO. 27:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to profits or profit margins realized by any entity with respect to Management Fees, Portfolio Selection Fees, and/or 12b-1 Fees.

**REQUEST FOR PRODUCTION NO. 28:**

All documents and tangible things in your possession, custody, or control sufficient to identify all members of each of the Investment Management Teams for each of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 29:**

All documents and tangible things in your possession, custody, or control that constitute or concern any annual financial statements (audited and unaudited) of PIM, PRM, or any of The Funds covering any and all times from January 1, 2000 to the present including, but not limited to, income statements; balance sheets; statements of cash flows; statements of operations; all footnotes relating thereto; all cost allocation policies or procedures relating thereto; and all underlying source materials, supporting materials, and back-up materials considered or relied upon in generating such documents, including ledgers and sub-ledgers.

**REQUEST FOR PRODUCTION NO. 30:**

All documents and tangible things in your possession, custody, or control that constitute or concern any monthly or quarterly financial statements (audited and unaudited) of PIM, PRM, or any of The Funds covering any and all times during the Damages Period including, but not limited to, income statements; balance sheets; statements of cash flows; statements of operations; all footnotes relating thereto; all cost allocation policies or procedures relating thereto; and all underlying source materials, supporting materials, and

back-up materials considered or relied upon in generating such documents, including ledgers and sub-ledgers.

**REQUEST FOR PRODUCTION NO. 31:**

All documents and tangible things in your possession, custody, or control that constitute or concern any annual financial statements (audited and unaudited) of any parent or affiliate entities whose financial results include the results of PIM or PRM covering any and all times from January 1, 2000 to the present including, but not limited to, income statements; balance sheets; statements of cash flows; statements of operations; all footnotes relating thereto; and all underlying source materials, supporting materials, and back-up materials considered or relied upon in generating such documents.

**REQUEST FOR PRODUCTION NO. 32:**

All documents and tangible things in your possession, custody, or control that constitute or concern any monthly or quarterly financial statements (audited and unaudited) of any parent or affiliate entities whose financial results include the results of PIM or PRM covering any and all times during the Damages Period including, but not limited to, income statements; balance sheets; statements of cash flows; statements of operations; all footnotes relating thereto; and all underlying source materials, supporting materials, and back-up materials considered or relied upon in generating such documents.

**REQUEST FOR PRODUCTION NO. 33:**

All documents and tangible things in your possession, custody, or control that constitute, concern, or relate to any Form N-SAR filed on behalf of any of The Funds including, but not limited to, all underlying source materials, supporting materials, and/or

back-up materials considered or relied upon in any response to Question No. 54 appearing in said Form N-SAR documents.

**REQUEST FOR PRODUCTION NO. 34:**

All documents and tangible things in your possession, custody, or control sufficient to identify all accounts other than The Funds that have been serviced by any Portfolio Leader or Portfolio Member of any of the Investment Management Teams for any of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 35:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to any explanations, characterizations, or descriptions of the activities that each of the Investment Management Teams perform for each of The Funds in connection with furnishing them with investment programs and/or making investment decisions for them about what securities shall be purchased, held, sold, or exchanged.

**REQUEST FOR PRODUCTION NO. 36:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, or concern any internal practices, policies, or procedures followed by PIM, PRM, or other affiliated Putnam entities in providing services and/or resources to any of The Funds in exchange for Management Fees or 12b-1 Fees.

**REQUEST FOR PRODUCTION NO. 37:**

All documents and tangible things in your possession, custody, or control that constitute, refer, or relate to contracts or agreements as between PIM and/or PRM on the one hand, and PAC on the other hand.



**REQUEST FOR PRODUCTION NO. 38:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of whether any employee of PIM and/or PRM can or does perform services on behalf of, or for the benefit of, PAC, or whether any employee of PAC can or does perform services on behalf of, or for the benefit of, PIM and/or PRM.

**REQUEST FOR PRODUCTION NO. 39:**

All documents and tangible things in your possession, custody, or control that reflect, concern, refer, or relate to any sharing of resources as between PIM and/or PRM on the one hand, and PAC on the other hand.

**REQUEST FOR PRODUCTION NO. 40:**

All documents and tangible things in your possession, custody, or control that reflect, concern, refer, or relate to nature or extent of the services that PAC provides under any Management Contract to any of its Institutional Accounts, or to the fee structures and/or breakpoints that PAC utilizes with respect to any of its Institutional Accounts.

**REQUEST FOR PRODUCTION NO. 41:**

All documents and tangible things in your possession, custody, or control sufficient to identify (including home and business addresses) all officers and all members of the Boards of Trustees, and their respective Boards of Trustees Committees, for each of The Funds at any and all times from January 1, 2002 to the present. With respect to each identified Trustee, such documents and tangible things should also be sufficient to identify their respective statuses as either interested or disinterested Trustees.

**REQUEST FOR PRODUCTION NO. 42:**

All documents and tangible things in your possession, custody, or control that concern, refer to, or address the existence, substance, merits, or outcomes of either of the Illinois Actions, the above-captioned action, or the Complaint filed herein.

**REQUEST FOR PRODUCTION NO. 43:**

All documents and tangible things in your possession, custody, or control that concern, refer to, or address any of the requirements or standards imposed by Section 36(b) of the Investment Company Act of 1940, 15 U.S.C. § 80a-35(b), or by Rule 12b-1 promulgated under that Act, 15 U.S.C. § 80a-12(b), 17 C.F.R. § 270.12b-1.

**REQUEST FOR PRODUCTION NO. 44:**

All documents and tangible things in your possession, custody, or control that concern, refer to, or address the issues of if, whether, how, or to what extent PIM has complied, should comply, or may comply with any of the requirements or standards imposed by Section 36(b) of the Investment Company Act of 1940, 15 U.S.C. § 80a-35(b).

**REQUEST FOR PRODUCTION NO. 45:**

All documents and tangible things in your possession, custody, or control that concern, refer to, or address the issues of if, whether, how, or to what extent PRM, other affiliated Putnam entities, and/or any of the Distribution Plans adopted by any of the Putnam Mutual Funds has complied, should comply, or may comply with any of the requirements or standards imposed by Rule 12b-1 of the Investment Company Act of 1940, 15 U.S.C. § 80a-12(b), 17 C.F.R. § 270.12b-1.

**REQUEST FOR PRODUCTION NO. 46:**

All documents and tangible things in your possession, custody, or control sufficient to identify all persons with decision-making responsibility relating to the dispositions or uses that PRM or other affiliated Putnam entities have made of the 12b-1 Fees received from any of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 47:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issue of how the portfolio holdings and/or the portfolio turnover rates of any of The Funds compare or contrast to the portfolio holdings and/or the portfolio turnover rates of any of the Institutional Accounts managed by PAC or any non-Putnam entity.

**REQUEST FOR PRODUCTION NO. 48:**

All documents and tangible things in your possession, custody, or control relevant to establishing the portfolio holdings (on a daily or other periodic basis) and/or the portfolio turnover rates of each of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 49:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to comparisons or contrasts drawn between the risk ratings or profiles of any of The Funds on the one hand, and the risk ratings or profiles of any of the Institutional Accounts managed by PAC or any non-Putnam entity on the other hand.

**REQUEST FOR PRODUCTION NO. 50:**

All documents and tangible things in your possession, custody, or control that concern, refer to, or address the investment performance or returns of any of The Funds.

**REQUEST FOR PRODUCTION NO. 51:**

All documents and tangible things in your possession, custody, or control that concern, refer to, or address the issues of if, whether, how, or to what extent the investment performance or returns of any of The Funds have underperformed relative to those of any other mutual funds or Institutional Accounts.

**REQUEST FOR PRODUCTION NO. 52:**

All documents and tangible things in your possession, custody, or control that reflect, concern, or relate to any comparisons or contrasts drawn between the investment performance or returns of any of The Funds on the one hand, and the investment performance or returns of any Institutional Account or any non-Putnam mutual fund on the other hand.

**REQUEST FOR PRODUCTION NO. 53:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the investment performance or returns of any Institutional Account managed by PAC.

**REQUEST FOR PRODUCTION NO. 54:**

All documents and tangible things in your possession, custody, or control that reflect, concern, refer, or relate to any decision or agreement made by PIM and/or PRM to waive fees and reimburse expenses of any of The Funds through at least July 31, 2005 to the extent necessary to ensure that any of The Funds' expenses do not exceed the average expenses of other funds viewed by Lipper, Inc. as having the same investment classification or objective of any of The Funds.

**REQUEST FOR PRODUCTION NO. 55:**

All documents and tangible things in your possession, custody, or control sufficient to establish the amounts of Putnam-related compensation of any type (including cash and non-cash forms of compensation) earned or received by each of the members of the Investment Management Teams and the Boards of Trustees for each of the Funds at any and all times from January 1, 2002 to the present.

**REQUEST FOR PRODUCTION NO. 56:**

All documents and tangible things in your possession, custody, or control that reflect, concern, refer, or relate to any decision or agreement made by PIM and/or PRM effective as of January 1, 2004 to cease directing brokerage to broker-dealers in connection with the sale of fund shares.

**REQUEST FOR PRODUCTION NO. 57:**

All documents and tangible things in your possession, custody, or control that constitute the Fundamental Agreements and Declarations of Trust for each of The Funds, and/or any amendments or modifications thereto.

**REQUEST FOR PRODUCTION NO. 58:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, or concern any investment policies, investment objectives, investment classifications, and/or investment restrictions applicable to each of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 59:**

All documents and tangible things in your possession, custody, or control that constitute, reflect or concern any policies relating to the practice of simultaneously servicing

multiple accounts that have been applicable to any member of any Investment Management Team for any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 60:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, or concern any policies, practices, or procedures relating to trade allocations and/or to “cross-trading” among or between Putnam-advised accounts.

**REQUEST FOR PRODUCTION NO. 61:**

All documents and tangible things in your possession, custody, or control that constitute any written code of ethics applicable to any employee of PIM or PRM.

**REQUEST FOR PRODUCTION NO. 62:**

All documents and tangible things in your possession, custody, or control that constitute any record retention policies adopted or followed by PIM and/or PRM.

**REQUEST FOR PRODUCTION NO. 63:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of if, whether, or to what extent PIM and/or PRM have insurance coverage potentially applicable to the costs of defending the above-captioned action, and/or to indemnification for any damages awarded or assessed in the above-captioned action.

**REQUEST FOR PRODUCTION NO. 64:**

All documents and tangible things in your possession, custody, or control that constitute non-publicly issued financial reports prepared by, or on behalf of, any Putnam entity that concern or relate to the provision of management and/or investment advisory services to any of The Funds. Such financial reports might be expected to include, for example,



calculations, assessments, itemizations, reviews, cost benefit analyses, or other summarizations of PIM's costs and expenses incurred, income and revenues received, and/or profits realized.

**REQUEST FOR PRODUCTION NO. 65:**

All documents and tangible things in your possession, custody, or control relevant to identifying, and establishing the amounts of, each of the various types of monies, fees, and/or reimbursable expenses *other than Management Fees or 12b-1 Fees* that PIM, PRM, or other affiliated Putnam entities have received from any of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 66:**

All documents and tangible things in your possession, custody, or control relevant to establishing the profits and profit margins that PIM, PRM, or other affiliated Putnam entities have realized in connection with each of the various types of monies, fees, and/or reimbursable expenses *other than Management Fees or 12b-1 Fees* that they have received from any of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 67:**

All documents and tangible things in your possession, custody, or control relevant to establishing the costs, expenses, and expense ratios that PIM, PRM, or other affiliated Putnam entities have incurred in connection with each of the services and/or resources that they have provided in exchange for the various types of monies, fees, and/or reimbursable expenses *other than Management Fees or 12b-1 Fees* that they have received from any of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 68:**

All documents and tangible things in your possession, custody, or control relevant to establishing what other persons or entities were paid monies, and in what amounts, by PIM and/or PRM in connection with their provision of services to The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 69:**

All documents and tangible things in your possession, custody, or control relevant to identifying, and establishing the amounts of, each of the various types of costs and expenses that each of The Funds incurred at any and all times during the Damages Period *other than from their payments of Management Fees or 12b-1 Fees* including, but not limited to, investor servicing fee expenses; custodian fee expenses; trustee compensation costs and expenses; administrative services expenses; and/or any other types of costs or expenses.

**REQUEST FOR PRODUCTION NO. 70:**

All documents and tangible things in your possession, custody, or control relevant to identifying each of the various types of services and/or resources that were provided to each of The Funds at any and all times during the Damages Period in exchange for the various types of monies, fees, and/or reimbursable expenses *other than Management Fees or 12b-1 Fees* that were paid by any of The Funds.

**REQUEST FOR PRODUCTION NO. 71:**

All documents and tangible things in your possession, custody, or control relevant to identifying and establishing the persons or entities who received payments from any of The Funds, and in what amounts, in connection with the various types of costs and expenses that

The Funds incurred at any and all times during the Damages Period *other than from their payments of Management Fees or 12b-1 Fees.*

**REQUEST FOR PRODUCTION NO. 72:**

All documents and tangible things in your possession, custody, or control that constitute the minutes or notes of each meeting of any of the Boards of Trustees, or of their Boards of Trustees Committees, for any of The Funds held at any time from January 1, 2002 to the present.

**REQUEST FOR PRODUCTION NO. 73:**

All documents and tangible things in your possession, custody, or control that constitute materials shown or provided to, and/or considered by, any of the Boards of Trustees, or their Boards of Trustees Committees, for any of The Funds in connection with any of their meetings held at any time from January 1, 2002 to the present.

**REQUEST FOR PRODUCTION NO. 74:**

All documents and tangible things in your possession, custody, or control that constitute any Management Contract and/or Distribution Plans entered into or adopted by any of The Funds, including any earlier versions, drafts, or proposals of or for any such Management Contracts or Distribution Plans.

**REQUEST FOR PRODUCTION NO. 75:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to any negotiations, bargaining, or communications relating to any actual or proposed Management Fees, Management Contracts, 12b-1 Fees, or Distribution Plans among or between PIM, PRM, or other affiliated Putnam entities, and any of the Boards of Trustees, or their Boards of Trustees Committees, for any of The Funds.

**REQUEST FOR PRODUCTION NO. 76:**

All documents and tangible things in your possession, custody, or control that reflect, concern, refer, or relate to any consideration given by any of the Boards of Trustees, or their Boards of Trustees Committees, to the issue of whether or not to approve any actual or proposed Management Contract or Distribution Plan for any of The Funds.

**REQUEST FOR PRODUCTION NO. 77:**

All documents and tangible things in your possession, custody, or control that constitute or reflect any information or materials provided to, and/or reviewed by, any of the Boards of Trustees, or their Boards of Trustees Committees, in connection with their consideration of whether or not to approve any actual or proposed Management Contract or Distribution Plan for any of The Funds. Such documents and tangible things should include, but not be limited to, those that constitute or reflect information or materials furnished pursuant to § 15(c) of the Investment Company Act of 1940.

**REQUEST FOR PRODUCTION NO. 78:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to any criteria or policies used by any of the Boards of Trustees, or their Boards of Trustees Committees, in connection with their consideration of whether or not to approve any actual or proposed Management Contract or Distribution Plan for any of The Funds.

**REQUEST FOR PRODUCTION NO. 79:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to any suggestion, opinion, conclusion, or proposal about potentially withholding approval of any Management Contract or Distribution Plan for

any of the Putnam Mutual Funds by any of the Boards of Trustees, or by their Boards of Trustees Committees.

**REQUEST FOR PRODUCTION NO. 80:**

All documents and tangible things in your possession, custody, or control that reflect, concern, refer, or relate to any consideration given by any of the Boards of Trustees, or their Boards of Trustees Committees, to terminating any Management Contract and/or Distribution Plan existing between any of the Putnam Mutual Funds and PIM or PRM.

**REQUEST FOR PRODUCTION NO. 81:**

All documents and tangible things in your possession, custody, or control that reflect, concern, refer, or relate to any consideration given by any of the Boards of Trustees, or their Boards of Trustees Committees, to permitting, directing or obligating any of the Putnam Mutual Funds to pay Management Fees and/or 12b-1 Fees to any entities other than PIM or PRM.

**REQUEST FOR PRODUCTION NO. 82:**

All documents and tangible things in your possession, custody, or control that reflect, concern, refer, or relate to any consideration given by any of the Boards of Trustees, or their Boards of Trustees Committees, to the requirements or standards imposed by Section 36(b) of the Investment Company Act of 1940 or Rule 12b-1 promulgated thereunder, and/or to the issues of whether PIM, PRM, or other affiliated Putnam entities have acted in compliance therewith in relation to any Management Contract or Distribution Plan with any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 83:**

All documents and tangible things in your possession, custody, or control that constitute or reflect any information or materials concerning Management Fees or 12b-1 Fee charged by entities other than PIM or PRM that have been shown or provided to, and/or considered by, any of the Boards of Trustees, or their Boards of Trustees Committees, for any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 84:**

All documents and tangible things in your possession, custody, or control that constitute or reflect any information or materials concerning PAC that have been shown or provided to, and/or considered by, any of the Board of Trustees, or their Board of Trustees Committees, for any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 85:**

All documents and tangible things in your possession, custody, or control that constitute or reflect any information or materials concerning the status, activities, investment performance or returns, or expense ratios of any of The Funds that have been shown or provided to, and/or considered by, any of the Boards of Trustees, or their Boards of Trustees Committees.

**REQUEST FOR PRODUCTION NO. 86:**

All documents and tangible things in your possession, custody, or control that reflect, concern, refer, or relate to any consideration given by any of the Boards of Trustees, or their Boards of Trustees Committees, in deciding whether or not to approve any actual or proposed Management Contract for any of The Funds to the factors for assessing the reasonableness of Management Fees established in *Gartenberg v. Merrill Lynch Asset Management, Inc.*, 694



F.2d 923 (2d Cir. 1982) and its progeny. These factors include the following: (i) sharing of economics of scale benefit; (ii) comparisons to other relevant fee structures; (iii) the nature and quality of services provided; (iv) the profitability of The Funds to PIM and its affiliates; (v) the receipt of other Fall-Out Benefits or indirect profits; and (vi) the independence and conscientiousness of the Trustees.

**REQUEST FOR PRODUCTION NO. 87:**

All documents and tangible things in your possession, custody, or control that reflect, concern, refer, or relate to any consideration given by any of the Boards of Trustees, or their Boards of Trustees Committees, for any of the Putnam Mutual Funds to articles written by critics of the alleged disparity between retail and institutional fee schedules, to articles by the ICI or others defending such fee differences, and/or to decisions of the courts providing guidance with respect to such issues.

**REQUEST FOR PRODUCTION NO. 88:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of if, whether, how, or to what extent Economies of Scale Benefits and/or Fall-Out Benefits exist in the mutual fund industry relative to the provision of services in connection with Management Contracts and/or Distribution Plans.

**REQUEST FOR PRODUCTION NO. 89:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of if, whether, how, or to what extent Economies of Scale Benefits and/or Fall-Out Benefits have been, are, could be, or should be shared as between providers of services in connection with Management Contracts and/or Distribution Plans on the one hand, and mutual funds or their shareholders on the other hand.

**REQUEST FOR PRODUCTION NO. 90:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of if, whether, how, or to what extent PIM, PRM, and/or other affiliated Putnam entities realize Economies of Scale Benefits and/or Fall-Out Benefits in connection with their provision of any services or resources to any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 91:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of if, whether, how, or to what extent PIM, PRM, and/or other affiliated Putnam entities share with any of the Putnam Mutual Funds any Economies of Scale Benefits and/or Fall-Out Benefits they realize in connection with their provision of any services or resources to any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 92:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, or concern any quantification of Economies of Scale Benefits and/or Fall-Out Benefits that PIM, PRM, and/or other affiliated Putnam entities realize in connection with their provision of any services or resources to any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 93:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of whether PIM, PRM, or other affiliated Putnam entities have failed to share any Economies of Scale Benefits and/or Fall-Out Benefits with any of the Putnam Mutual Funds to a degree that has been inequitable, unfair, harmful, detrimental,

disadvantageous, or contrary to the interests or welfare of any of the Putnam Mutual Funds or their shareholders.

**REQUEST FOR PRODUCTION NO. 94:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to any model schedules for Management Fees developed by, or on behalf of, PIM, PRM, and/or any of the Boards of Trustees, or their Boards of Trustees Committees, for any of the Putnam Mutual Funds, including any earlier versions, drafts, or proposals of or for such model fee schedules.

**REQUEST FOR PRODUCTION NO. 95:**

All documents and tangible things in your possession, custody, or control that reflect, concern, or relate to any comparisons or contrasts drawn between the concepts of investment performance on the one hand, and investment process on the other hand, including investment process as it relates to research and/or decision-making.

**REQUEST FOR PRODUCTION NO. 96:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to any explanations, characterizations, or descriptions of the investment process that has been or may be followed by PIM in providing services to any of the Putnam Mutual Funds, including the investment process as it relates to research and/or decision-making.

**REQUEST FOR PRODUCTION NO. 97:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to any indemnifications provided by PIM, PRM, or other affiliated Putnam entities to any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 98:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to any policies, practices, or procedures that have been or may be followed by PIM, PRM, or other affiliated Putnam entities with regard to making disclosures to shareholders and/or to the public regarding any Management Fees and/or 12b-1 Fees charged to any Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 99:**

All documents and tangible things in your possession, custody, or control that constitute or reflect any of the investment programs that PIM has proposed or furnished to each of The Funds.

**REQUEST FOR PRODUCTION NO. 100:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the development or formulation of each of the investment programs that PIM has proposed or furnished to each of The Funds.

**REQUEST FOR PRODUCTION NO. 101:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to each of the fee schedules for Management Fees and/or for 12b-1 Fees that PIM, PRM, or other affiliated Putnam entities have proposed or furnished to each of The Funds.

**REQUEST FOR PRODUCTION NO. 102:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the development or formulation of each of the fee schedules for Management

Fees and/or for 12b-1 Fees that PIM, PRM, or other affiliated Putnam entities have proposed or furnished to each of The Funds.

**REQUEST FOR PRODUCTION NO. 103:**

All documents and tangible things in your possession, custody, or control relevant to identifying, and/or establishing the amounts of, any Management Fees or 12b-1 Fees that PIM or PRM have received from any entity other than any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 104:**

All documents and tangible things in your possession, custody, or control relevant to establishing on an annualized basis relative to each of The Funds for each of the years of their existence: (i) their respective portfolio holdings; (ii) the amounts of their assets under management; (iii) the amounts of their Management Fees and 12b-1 Fees paid; (iv) their applicable fee schedules; (v) the costs, expenses, and expense ratios incurred by PIM, PRM, or other affiliated Putnam entities; and (vi) the profits and profit margins realized by PIM, PRM, or other affiliated Putnam entities.

**REQUEST FOR PRODUCTION NO. 105:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to constitute any charters that have been or are applicable to any Boards of Trustees, or their Boards of Trustees Committees, for any of The Funds.

**REQUEST FOR PRODUCTION NO. 106:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to any policies, practices, or procedures applicable

to, and or adopted or followed by, PIM with respect to seeking and obtaining the most favorable prices and execution of trades on behalf of any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 107:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to the drafting, revising, and/or inclusion of: (i) the new passage entitled "Management fee considerations" that recently began to appear on Putnam's web site; and/or (ii) the new standard passages entitled "Trustee approval of management contracts" that recently began to appear in, *inter alia*, the semiannual reports published on behalf of some or all of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 108:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of if, how, whether, or to what extent any conflicts of interests do or may exist between PIM, PRM, or other affiliated Putnam entities on the one hand, and any of the Putnam Mutual Funds and/or their shareholders on the other hand.

**REQUEST FOR PRODUCTION NO. 109:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of if, how, whether, or to what extent the 12b-1 Fees charged by PRM or other affiliated Putnam entities have resulted in lower average expense ratios and/or lower flow volatility for any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 110:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the issues of if, how, whether, or to what extent the Management Fees and/or



the 12b-1 Fees charged by PIM, PRM, or other affiliated Putnam entities have been or should be made transparent to actual or potential shareholders in any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 111:**

All documents and tangible things in your possession, custody, or control that reflect, concern, or relate to any comparisons or contrasts drawn between how the profits and/or profit margins that PIM, PRM, or other affiliated Putnam entities have realized on Management Fees and/or 12b-1 Fees charged to any of the Putnam Mutual Funds have varied across fee schedule breakpoints.

**REQUEST FOR PRODUCTION NO. 112:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to any investigation by any governmental, administrative, or self-regulatory body regarding the propriety or amount of any fees charged to any of the Putnam Mutual Funds including, but not limited to, all documents produced in such investigations, all transcripts of testimony, and all communications with such governmental, administrative, or self-regulatory bodies concerning such investigations.

**REQUEST FOR PRODUCTION NO. 113:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to any litigation, arbitration, or mediation proceedings involving PIM and/or PRM as parties that contained any allegation concerning excessive fees charged to any of the Putnam Mutual Funds including, but not limited to, complaints, orders, judgments and settlement agreements.

**REQUEST FOR PRODUCTION NO. 114:**

All documents and tangible things in your possession, custody, or control that constitute organizational charts or any other documents describing the corporate structure of the Putnam family of entities, and/or the corporate relationships between PIM, PRM, PAC, Putnam LLC, and any of their other affiliates, parents, subsidiaries, and related entities.

**REQUEST FOR PRODUCTION NO. 115:**

All documents and tangible things in your possession, custody, or control that constitute organizational charts, telephone books, directories, and other documents describing the names, positions, and/or responsibilities of the individual employees of PIM and PRM at any and all times from January 1, 2002 to the present.

**REQUEST FOR PRODUCTION NO. 116:**

All documents and tangible things in your possession, custody, or control relevant to establishing the appropriate Lipper peer group for each of The Funds.

**REQUEST FOR PRODUCTION NO. 117:**

All documents and tangible things in your possession, custody, or control used for, or concerning, the training of any employees of Putnam entities including, but not limited to, any employee handbooks, manuals, procedure memoranda, and compliance guides.

**REQUEST FOR PRODUCTION NO. 118:**

All documents and tangible things in your possession, custody, or control that constitute resumes, curriculum vitae or other documents containing the professional and working history for anyone who served as an officer, Trustee, or member of any of the Investment Management Teams for any of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 119:**

All documents and tangible things in your possession, custody, or control that constitute organizational or charter documents for PIM and/or PRM including, but not limited to, articles or certificates of incorporation, partnership agreements, by-laws, and related filings with the relevant secretary of state.

**REQUEST FOR PRODUCTION NO. 120:**

All documents and tangible things in your possession, custody, or control that constitute prospectuses for any of The Funds, including all supplements or amendments thereto, or that constitute computer databases serving as an underlying source of any financial information appearing in such prospectuses.

**REQUEST FOR PRODUCTION NO. 121:**

All documents and tangible things in your possession, custody, or control that constitute proxy statements for any of The Funds, including all supplements or amendments thereto, or that constitute computer databases serving as an underlying source of any financial information appearing in such prospectuses.

**REQUEST FOR PRODUCTION NO. 122:**

All documents and tangible things in your possession, custody, or control that constitute publicly issued annual, quarterly, semi-annual, or other periodic reports, or Statements of Additional Information, for any of The Funds, including all supplements or amendments thereto, or that constitute computer databases serving as an underlying source of any financial information appearing in such reports or statements.

**REQUEST FOR PRODUCTION NO. 123:**

All documents and tangible things in your possession, custody, or control that constitute internal financial reports that provide further detail or breakdowns for the line items contained in any publicly available financial report for any of The Funds.

**REQUEST FOR PRODUCTION NO. 124:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to the benefits and advantages, or detriments and disadvantages, to any of The Funds of using PIM as their investment advisor as opposed to using some entity other than PIM.

**REQUEST FOR PRODUCTION NO. 125:**

All documents and tangible things in your possession, custody, or control that constitute contracts or agreements as between any member of any Board of Trustees for any of The Funds on the one hand, and any Putnam entity on the other hand.

**REQUEST FOR PRODUCTION NO. 126:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to any arrangements for any member of any of the Boards of Trustees for any of The Funds to receive brokerage services at a discount.

**REQUEST FOR PRODUCTION NO. 127:**

All documents and tangible things in your possession, custody, or control that constitute, contracts or agreements (other than Management Contracts) between or among PIM, PRM, and/or any of The Funds.

**REQUEST FOR PRODUCTION NO. 128:**

All documents and tangible things in your possession, custody, or control that list, explain, characterize, or describe the nature and/or extent of any services provided by or on behalf of PIM and/or PRM to any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 129:**

All documents and tangible things in your possession, custody, or control that reflect, concern, refer, or relate to any securities clearing relationship between PIM, PRM, and any other person or entity.

**REQUEST FOR PRODUCTION NO. 130:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to any internal policies, practices, or procedures purportedly followed by PIM and/or PRM when providing services under any Management Contract or pursuant to any Distribution Plan for any of the Putnam Mutual Funds.

**REQUEST FOR PRODUCTION NO. 131:**

All documents and tangible things in your possession, custody, or control that constitute or summarize records of the daily purchases and sales of securities made on behalf of each of The Funds at any and all times during the Damages Period.

**REQUEST FOR PRODUCTION NO. 132:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to any legal, accounting, financial, compliance, or other audits (whether internal or external) relating any of The Funds including, but not limited to, any opinion letters of professionals such as attorneys or accountants, and/or any information or materials provided to any auditor relating to Management Fees and/or 12b-1 Fees.

**REQUEST FOR PRODUCTION NO. 133:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to any contracts or agreements by which PIM and/or PRM subcontract with or for any other person or entity to perform any services pursuant to any Management Contract or Distribution Plan with any of The Funds.

**REQUEST FOR PRODUCTION NO. 134:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to any of the Plaintiffs in the above-captioned action, including but not limited to account opening documents and account statements.

**REQUEST FOR PRODUCTION NO. 135:**

All documents and tangible things in your possession, custody, or control that concern, refer, or relate to identifying all securities research or analysis used in connection with any of The Funds that was provided to PIM by any person or entity other than PIM employees, including the costs to PIM of acquiring such securities research or analysis.

**REQUEST FOR PRODUCTION NO. 136:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate any practices, contracts, or agreements by which securities owned by or on behalf of any of The Funds are loaned to any other person or entity, including documents relevant to establishing the amount of profits realized as the result of such loans.



**REQUEST FOR PRODUCTION NO. 137:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, refer, or relate to communications to or from shareholders of any of The Funds concerning Management Fees and/or 12b-1 Fees charged to The Funds.

**REQUEST FOR PRODUCTION NO. 138:**

All documents and tangible things in your possession, custody, or control relevant to establishing on an annualized basis relative to each of The Funds for each of the years of their existence the profits that PIM and/or PRM have realized on the Management Fees and 12b-1 Fees that they have charged, and the per unit costs and expenses that they have incurred.

**REQUEST FOR PRODUCTION NO. 139:**

All documents and tangible things in your possession, custody, or control that constitute, reflect, concern, or refer or relate to marketing and/or sales plans for any of The Funds.

**REQUEST FOR PRODUCTION NO. 140:**

All documents and tangible things in your possession, custody, or control constituting internal financial reports or analyses pertaining to PIM, PRM, or any of The Funds including, but not limited to, budgets, forecasts, and cost accounting reports.

**REQUEST FOR PRODUCTION NO. 141:**

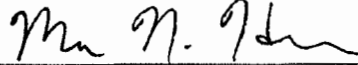
All documents and tangible things in your possession, custody, or control that reflect, concern, or relate to the issues of if, whether, how, or to what extent any of the portfolio holdings or investment strategies of any of PAC's Institutional Accounts are, or have been, modeled after any of the portfolio holdings or investment strategies of any of the Putnam Mutual Funds.

Dated: May 26, 2005

Respectfully served,

STEVEN G. WICKS;  
GERALD A. KALBFLEISCH;  
MICHAEL HATHAWAY; and  
MYRTLE HATHAWAY

By their attorneys,



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**CERTIFICATE OF SERVICE**

I, Marc N. Henschke, hereby certify that on May 26, 2005, I caused the attached *Plaintiffs' First Set Of Requests For The Production Of Documents And Tangible Things To Defendants Putnam Investment Management, LLC And Putnam Retail Management, LLP* to be served by hand and/or first class mail upon Defendants' counsel of record at the following addresses:

**BY FIRST CLASS MAIL**

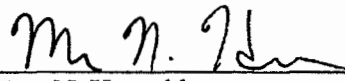
Seth M. Schwartz, Esq.  
Skadden, Arps, Slate, Meagher & Flom LLP  
Four Times Square  
New York, NY 10036

and

**BY HAND DELIVERY**

James R. Carroll, Esq.  
Skadden, Arps, Slate, Meagher & Flom LLP  
One Beacon Street  
Boston, Massachusetts 02108-3194

Dated: May 26, 2005

  
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Marc N. Henschke